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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,741	02/09/2004	Laurence E. Allen III	10887-014002	1521
26181	7590	05/17/2005	EXAMINER	
FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			RODRIGUEZ, JOSEPH C	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/775,741	ALLEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Joseph C Rodriguez	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-38 is/are pending in the application.  
4a) Of the above claim(s) 10-30 is/are withdrawn from consideration.

5)  Claim(s) 31 and 32 is/are allowed.

6)  Claim(s) 1,2,4-9,33 and 38 is/are rejected.

7)  Claim(s) 3 and 34-37 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 09 February 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/22/04, 1/11/05.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date.       .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other:       .

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of claims 1-9 and 31-38 in the reply filed on March 2, 2005 is acknowledged.

Claims 10-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claim grouping, there being no allowable generic or linking claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-9, 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xiao et al. ("Xiao") (US 6,452,126) in view of Osing (US 6,070,733), Stuckrad et al. ("Stuckrad") (US 5,566832).

Xiao (Fig. 3 or 4) teaches a method of separating a polymer mixture comprising providing a mixture including polymer components (near "Feed"); adding to the mixture a particulate media for selectively mediating a triboelectric charging of the polymer mixture (near text "Media"), the charging media including a polymeric material having a selected position within an electrostatic charging sequence (Fig. 5; col. 1, ln. 60-col. 2,

In. 18), triboelectrically charging the mixture with the media (near text "Triboelectric Charging"); separating two or more components of the polymer mixture according to the triboelectric charge (see collection bins at bottom of figures); and recovering at least a portion of the particulate media using a recovery process (see text regarding separation and re-circulation of the Media). Further, Xiao also expressly teaches the separation of the media from the mixture either before or after the electrostatic separation and also teaches a variety of separation process for accomplishing such (col. 2, In. 19-27 teaching media recovery via air classification, gravity concentration, froth flotation, etc.). Further, Xiao also teaches the recovery of a neutral middle fraction (Fig. 4). Here, the media can be regarded as including a conductive material as it functions to transfer the surface charges amongst the different mixtures.

Xiao as set forth above thus teaches all that is claimed except for expressly teaching using a functional additive with the media to assist with the variety of recovery separation processes. The use of a functional additive, however, is well-known in the plastic separating arts. For instance, Osing teaches the addition of a ferromagnetic additive (Fig. 1; col. 2, In. 14-55), Stuckrad teaches the addition of a foaming agent (Abstract; Fig. 4-6) and Rasmussen teaches the use of a density additive (Abstract; Fig. 1) to improve the plastic separation. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Xiao as taught above as Xiao already teaches the use of a variety of plastic separation processes to recover the plastic media and the prior art teaches that it is well known to use functional additives to improve these separation processes.

***Allowable Subject Matter***

Claims 31-32 are allowed.

Claims 3 and 34-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

**<http://pair-direct.uspto.gov>**

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

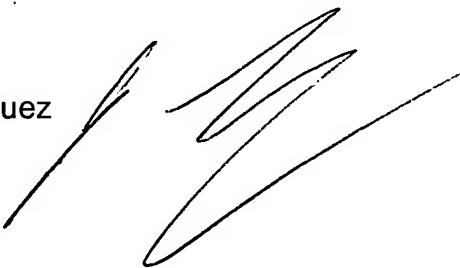
Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584**. Further, the supervisor's contact information is Donald Walsh, 571-272-6944.

Signed by Examiner Joseph Rodriguez

jcr

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May 11, 2005



DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600